IN THE CLAIMS:

1	1. (Original) A method for crosstalk cancellation, which allows a listener a degree of
2	freedom of movement, comprising:
3	accepting a binaural signal intended for the left and right ears of a listener; and
4	processing the binaural signal to produce output signals which are suitable for re-
5	production through at least two loudspeakers and which cancel crosstalk in a plurality of
6	frequency bands at an ear of the listener in a corresponding plurality of positions.
1	2. (Original) The method of claim 1, wherein the plurality of frequency bands and
2	corresponding plurality of positions is substantially optimized for cancellation of
3	crosstalk over a range of anticipated listener positions.
1	3. (Original) A method for crosstalk cancellation, which allows a listener a degree of
2	freedom of movement, comprising:
3	accepting a binaural signal intended for the left and right ears of a listener; and
4	filtering the binaural signal according to a matrix of transfer functions to produce
5	output signals suitable for reproduction through at least two loudspeakers, each element
6	of the pseudoinverse of said matrix having, in each of a plurality of frequency bands, a
7	magnitude substantially proportional to the magnitude of the transfer function between
8	the loudspeaker and the listener ear corresponding to that element for a listener position
9	chosen from a plurality of listener positions corresponding to the plurality of frequency
10	bands.

1 4. (Original) A method for crosstalk cancellation, which allows a listener a degree of 2 freedom of movement, comprising: 3 accepting a binaural signal intended for the left and right ears of a listener; and 4 filtering the binaural signal according to a matrix of transfer functions to produce 5 output signals suitable for reproduction through at least two loudspeakers, said matrix 6 being derived from a plurality of transfer functions between the loudspeakers and an ear 7 of the listener in a corresponding plurality of listener positions. 1 5. (Original) A method for crosstalk cancellation, which allows a listener a degree of 2 freedom of movement, comprising: 3 accepting a binaural signal intended for the left and right ears of a listener; and 4 processing the binaural signal to produce output signals suitable for reproduction 5 through at least two loudspeakers and substantially optimized for cancellation of 6 crosstalk over a range of anticipated listener positions. 1 6. (Original) A method for crosstalk cancellation, which allows a listener a degree of 2 freedom of movement, comprising: 3 accepting a binaural signal intended for the left and right ears of a listener; and 4 filtering the binaural signal according to a matrix of transfer functions to produce 5 output signals suitable for reproduction though at least two loudspeakers, the magnitude 6 of an element of said matrix being substantially optimized for cancellation of crosstalk 7 over a range of anticipated listener positions.

- 7. (Original) A method for crosstalk cancellation, which allows a listener a degree of
- 2 freedom of movement, comprising:
- 3 accepting a binaural signal intended for the left and right ears of a listener; and
- 4 filtering the binaural signal according to a matrix of transfer functions to produce
- 5 output signals suitable for reproduction through at least two loudspeakers, the magnitude
- 6 of an element of said matrix being derived from an average of the corresponding element
- 7 over a set or matrices, each matrix in said set designed to cancel crosstalk for a particular
- 8 listener at a particular listener position.
- 8. (Original) A method for crosstalk cancellation, which allows a listener a degree of
- 2 freedom of movement, comprising:
- 3 accepting a binaural signal intended for the left and right ears of a listener; and
- 4 filtering the binaural signal according to a matrix of transfer functions to produce
- 5 output signals suitable for reproduction through at least two loudspeakers, the magnitude
- 6 of an element of said matrix substantially being a smoothed version of the magnitude of
- 7 the corresponding element of a matrix designed to cancel crosstalk.
- 9. (Original) The method of claim 8, wherein said smoothing is increased over
- 2 frequencies at which the transfer functions between said loudspeakers and listener ear are
- 3 most sensitive to listener position.

1 10. (Original) A method for crosstalk cancellation, which allows a listener a degree of 2 freedom of movement, comprising: 3 accepting a binaural signal intended for the left and right ears of a listener; and 4 filtering the binaural signal according to a matrix of transfer functions to produce 5 output signals suitable for reproduction through at least two loudspeakers, the magnitude 6 of an element of said matrix substantially being an interpolated version of the magnitude 7 of the corresponding element of a matrix designed to cancel crosstalk. 11-13. (Canceled) 1 14. (Original) A method for crosstalk canceler equalization comprising: 2 accepting a binaural signal intended for the left and right ears of a listener; and 3 processing the binaural signal to produce output signals which are suitable for 4 reproduction through at least two loudspeakers for a range of anticipated listener 5 positions, said processing being designed to cancel crosstalk at an ear of said listener and 6 including equalization filtering substantially minimizing discrepancies in equalization 7 between a channel of the binaural signal and the sound appearing at an ear of the listener

in response to said binaural channel over said range of listener positions.

15-17. (Canceled)

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1 18. (Original) A method for crosstalk canceler equalization comprising: 2 accepting a binaural signal intended for the respective left and right ears of a 3 listener; 4 accepting a crosscoherence function of frequency; and 5 processing the binaural signal to produce a crosstalk canceled output signals 6 suitable for reproduction through loudspeakers such that the power spectrum of a channel 7 of said canceled output in response to a two-channel random process having equal 8 channel power spectra and channel crosscoherence equal to said crosscoherence function 9 of frequency is substantially proportional to said power spectra. 19. (Original) The method of claim 18, wherein the step of processing includes feeding 1 2 back a function of the binaural signal though a delay substantially equal to the difference 3 in delay between two of said output signals in response to a signal applied to a channel of 4 said binaural signal. 1 20. (Original) A method for crosstalk cancellation, comprising: 2 accepting a binaural signal intended for the respective left and right ears of a 3 listener; 4 measuring a signal characteristic from the binaural signal; and 5 processing the binaural signal to produce a crosstalk canceled output suitable for 6 reproduction through loudspeakers, adapting said processing to the measured signal

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characteristic.

1	21. (Original) A method for crosstalk canceler equalization, comprising;
2	accepting a binaural signal intended for the respective left and right ears of a
3	listener;
4	measuring a signal characteristic from the binaural signal; and
5	processing the binaural signal to produce a crosstalk canceled output suitable for
6	reproduction through loudspeakers, adapting said processing to the measured signal
7	characteristic.
1	22. (Original) A method for crosstalk canceler equalization, comprising:
2	accepting a binaural signal intended for the respective left and right ears of a
3	listener;
4	measuring in a frequency band of said binaural signal a crosscoherence; and
5	processing the binaural signal to produce a crosstalk canceled output suitable for
6	reproduction through loudspeakers such that in said frequency band the power spectrum
7	of a channel of said canceled output in response to a two-channel random process having
8	equal channel power spectra and channel crosscoherence equal to said crosscoherence is
9	substantially proportional said power spectra.